

Application Serial No. 10/822,882  
Amendment dated January 18, 2007  
Response to Office Action dated October 20, 2006

**REMARKS/ARGUMENTS**

Applicant has received and carefully reviewed the Office Action of the Examiner mailed October 20, 2006. Claims 1-34 remain pending. Claims 1-5, 15, 17, 21-25, and 29-31 have been amended. Support for the amendments is found in the specification, claims, and drawings as originally filed. No new matter has been added. Reconsideration and reexamination are respectfully requested.

**Initialed Copies of IDS's**

The Examiner indicated that no legible copy of the 1449 filed with the IDS on November 16, 2005 was available. Applicants submit herewith a copy of the 1449 printed from PAIR. In addition to that IDS, Applicants respectfully request the Examiner provide an initialed copy of the 1449 filed with the IDS filed September 12, 2006.

**Rejection under 35 U.S.C. § 101**

Claims 1-34 are rejected as not producing a real life, real world, useful, concrete, and tangible result. Applicant respectfully traverses the rejection. Applicants do not concede the correctness of the rejection, however, in the interest of furthering prosecution, the claims have been amended to recite a step of storing test results, as suggested by the Examiner. Reconsideration and withdrawal of the rejection are respectfully requested.

**Rejection under 35 U.S.C. § 102(b)**

Claims 1-34 remain rejected as being anticipated by Hill et al. (EP 1 196 003 A2). Applicant traverses the rejection. Independent claim 1, as amended, recites a method for testing an HVAC system having an active component and a dormant component, including the steps of transmitting a test request to the HVAC system, performing a test on the dormant component of the HVAC system, producing a test result, and transmitting and storing that test result at a location outside the building structure containing the HVAC system. Hill et al. do not appear to

Application Serial No. 10/822,882  
Amendment dated January 18, 2007  
Response to Office Action dated October 20, 2006

teach or suggest such a method. The Examiner asserts that the continuous monitoring/testing of the entire system of Hill et al. would encompass monitoring/testing of both the dormant and active components of the HVAC system.

The Examiner appears to be asserting that the system of Hill et al. could perform the claimed method steps. The rejection is an anticipation rejection and thus requires a reference that teaches each and every element of the claim. MPEP 2131 states, "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Emphasis added. MPEP 2131 goes on to state that, in order to anticipate a claim, "[t]he identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)." Emphasis added.

Hill et al. do not appear to teach the method step of performing a test on the dormant component of the HVAC system in response to a request transmitted from a remote location, as is recited in claim 1. Hill et al. appear to teach a method in which an HVAC device is queried for status information. See paragraphs 0004-0007. Hill et al. also teach "server 12 checks to see if a message has been received to display diagnostic information such as that shown in Fig. 7. If so, the database is queried in step 532 for the diagnostic information, after which the diagnostic information is sent in step 534." Emphasis added; see paragraph 0028. Hill et al. also state:

Status information on the HVAC devices which is contained in the unit database is either updated on a regular basis or when requested by a message from the entry device. That is, status information can be sent to the server by the HVAC controller on a regular basis, or the server can request the status information from the HVAC controller on a regular basis, in addition to or in place of the server requesting status information in response to a message from the entry device.

Emphasis added; see paragraph 0032. Hill et al. thus appear to teach a system in which status information is requested and provided. Hill et al. do not, however, appear to teach the specific method steps recited in claim 1 regarding performing a test on a dormant component of an

HVAC system, and in particular, performing a test on the dormant component of the HVAC system in response to a request that is transmitted from a remote location, as is recited in claim 1.

Regarding Applicants' previous argument that Hill never initiates a "test", the Examiner asserts that to one of ordinary skill in the art performing diagnostics can be interpreted as being equivalent to performing a test. While the step of performing a diagnostic method or step might be similar to performing a test, Hill et al. do not appear to teach performing any diagnostic method, step, or test. As shown above, Hill et al. appear to teach merely requesting diagnostic information. The step of requesting information, as appears to be taught by Hill et al., cannot be deemed equivalent to the step of performing a test, as is recited in claim 1.

Additionally, the Examiner's assertion that the continuous monitoring/testing of the entire system of Hill et al. would encompass monitoring/testing of both the dormant and active components of the HVAC system does not appear to be supported by the teachings of Hill et al. Hill et al. is silent regarding a dormant component of the HVAC system, thus a fair reading of the reference cannot be interpreted as include an actual teaching of monitoring or testing a dormant component of the HVAC system.

If the Examiner is considering the specific method steps recited in the claims to be inherent in Hill et al., Applicants submit that there is no basis for such an interpretation. MPEP 2112 IV. states:

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is **necessarily present** in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999)

(Emphasis added). Applicants submit that the claimed method steps, in particular the step of performing a test on a dormant component of the HVAC system, is not necessarily present in Hill et al. It appears the Examiner is asserting that the claimed method steps could be performed by the system of Hill et al., which is not a proper basis for rejection, especially for an anticipation rejection.

Regarding the Examiner's interpretation of "primarily dormant" and "primarily active", the term 'primarily' has been deleted. Applicants submit that the specification provides a definition of "dormant" and "active" at, for example, page 9, lines 4-14. Applicant submits that in the absence of any specific teaching of performing a test on a dormant component of the HVAC system, the generic teaching of Hill et al. to request status information from the HVAC system 14 cannot be interpreted as teaching the claimed method step of performing a test on the dormant component of the HVAC system in response to a test request transmitted from a remote location. Further, Hill et al. do not appear to provide any motivation, suggestion or guidance for one of ordinary skill in the art to modify their method to include such a specific method step.

The Examiner asserts that Hill et al. teach querying the HVAC device which would include the dormant and active states. As noted above, there is no indication in Hill et al. that querying the HVAC device 14 includes the specific method step of performing a test on the dormant component of the HVAC system, and in particular, performing a test on a dormant component of the HVAC system in response to the test request. Applicant submits that Hill et al. do not teach each and every element of independent claim 1, thus Hill et al. cannot be deemed to anticipate claim 1 or the claims dependent thereon.

With respect to claims 2-5, the Examiner asserts that "it would be with reasonable interpretation to assume that the heating/cooling components are being monitored in both active and dormant states." Emphasis added. The rejection appears to be based on the Examiner's assumption of what the Hill et al. method might be used for. Applicants submit that such a basis is improper for an anticipation rejection. Additionally, the Examiner has not provided any indication of upon what this assumption is based. As stated above, Hill et al. is silent regarding a dormant component of the HVAC system. Further, Hill et al. does not appear to provide any

Application Serial No. 10/822,882  
Amendment dated January 18, 2007  
Response to Office Action dated October 20, 2006

indication or examples of what might be included in the status information that is stored in the database and provided upon receiving a query. Hill et al. do appear to teach unit information stored in a database as including room temperature, set point information, and status of operability of certain components. One of ordinary skill in the art would not equate the provision of information in a database with the method step of actually performing a test, and more particularly, actually performing a test in response to a test request transmitted from a remote location. Thus, even if one were to assume that the status information requested by Hill et al. included the unit information, Hill et al. appears to teach only requesting and providing information contained in a database, but does not appear to teach any actual testing being performed on any HVAC component, and in particular, any actual testing that is in response to the test request that is transmitted from a remote location. As stated above, for a reference to be deemed anticipatory, it must teach the identical invention in as complete detail as is contained in the claims. Hill et al. do not appear to teach the particular method steps as recited in the claims.

The Examiner has again maintained the rejection of claim 15, but has not addressed Applicant's specific arguments with respect to this rejection. The Examiner is respectfully requested to provide a response to the following arguments.

With respect to claim 15, the Examiner asserts that Hill et al. teach the HVAC system having two or more zones and a test that is performed activates the primarily dormant component in conjunction with each of the two or more zones, pointing to paragraph 7 for support. Applicant has carefully reviewed paragraph 7 of Hill et al. and has found no such teaching. As stated above, Hill et al. do not appear to teach transmitting a test request to the HVAC system from a remote location or performing a test on the dormant component of the HVAC system in response to the test request. In addition, Hill et al. do not appear to teach a test that activates a dormant component in conjunction with each of two or more zones, as is recited in claim 15.

The Examiner has maintained the rejection of independent claims 21, 25, 29, 30, and 31, and the claims dependent thereon, but has not addressed Applicant's specific arguments with respect to these claims. The Examiner is respectfully requested to provide a response to the following arguments.

Independent claim 21 recites, in part, the specific method step of:

performing one or more tests on each of the HVAC systems in response to the test request, and producing a test result for each of the HVAC systems, wherein at least one of the one or more tests that is performed activates and tests one or more of the active or dormant component of an HVAC system

(Emphasis added). Independent claim 29 recites a specific method step of activating a heating component at a time when the HVAC system would not normally call for heat. Independent claim 30 recites a specific method step of activating a cooling component at a time when the HVAC system would not normally call for cool.

Hill et al. do not appear to teach these and other method steps. Hill et al. do not appear to teach one or more tests that activate a component of the HVAC system that is not normally called for. Instead, and if anything, Hill et al. appear to be merely passive in this regard (i.e. Hill et al. do not appear to transmit any test requests to the HVAC controller, but merely appear to read up status information contained in a database). Further, as stated above, Hill et al. do not appear to teach anything with regard to a dormant component of the HVAC system. Applicant submits that the general monitoring/control method of Hill et al. cannot be seen to anticipate the specific method steps of activating a particular component of the HVAC system and then testing that component. In particular, the general monitoring/controlling methods of Hill et al. cannot be seen to anticipate the specific method steps of activating a heating component at a time when heat is not called for, or activating a cooling component at a time when cooling is not called for, as is recited in claims 29 and 30, respectively. Hill et al. thus do not teach each and every element of independent claims 21, 29, or 30 or the claims dependent thereon.

With respect to claim 25, the Examiner points to paragraph 32, lines 46-50 of Hill et al. as teaching the step of identifying which of the HVAC systems will likely need service by analyzing the test results. This passage of Hill et al., however, states:

Status information on the HVAC devices which is contained in the unit database is either updated on a regular basis or when requested by a message from the entry device.

Application Serial No. 10/822,882  
Amendment dated January 18, 2007  
Response to Office Action dated October 20, 2006

Applicant submits that Hill et al.'s teaching of updating status information cannot be seen to anticipate the specific method step of analyzing test results and identifying which of a plurality of HVAC systems will likely need service based on those test results, as is recited in independent claim 25. Hill et al. do not appear to teach each and every element of the claim and thus cannot be deemed to anticipate the independent claim or the claims dependent thereon.

The Examiner has maintained the rejection of claims 26-28, but has not addressed Applicant's specific arguments with respect to this rejection. The Examiner is respectfully requested to provide a response to the following arguments.

Regarding claim 26, the Examiner asserts that Figure 1 of Hill et al. discloses the step of providing different test requests to at least two of a plurality of HVAC systems, wherein each test request identifies a different test to be performed. Figure 1 merely illustrates two entry devices in communication with a server that is in communication with two HVAC devices. Neither Figure 1, nor any other portion of Hill et al., appears to teach the method step recited in claim 26. As noted above, Hill et al. do not appear to transmit any test requests, as asserted by the Examiner.

Regarding claim 27, the Examiner asserts that it is within reasonable interpretation to infer that a service technician would charge for his/her services. Applicant respectfully traverses the rejection. As stated above, making an assumption as to a method step that is not supported by a specific teaching in a reference would be an improper basis for an anticipation rejection. Additionally, even if such assumption were correct, the assumption that a technician would charge for work does not meet the elements of the claim. Claim 27 recites the step of charging an owner an amount that depends on the particular test that is performed on the HVAC system. Hill et al. do not appear to teach such specific method step.

The Examiner asserts that Hill et al. teach the method step of scheduling service on at least some of the HVAC systems that have been identified as likely needing service, as is recited in claim 28, citing paragraph 7, lines 30-35 for support. Applicant has carefully reviewed this passage in Hill et al. and has found no such teaching. Hill et al. teach a method in which status information is provided upon request and updated on a server, and in which settings on at least

Application Serial No. 10/822,882  
Amendment dated January 18, 2007  
Response to Office Action dated October 20, 2006

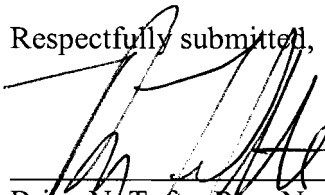
one HVAC device are changed from an entry device. Hill et al. do not appear to teach any steps relating to scheduling service for HVAC systems that have been identified as likely needing service.

Independent claim 31 recites a method including the steps of receiving one or more maintenance signals at each HVAC system, the maintenance signals activating an HVAC component, performing a self-test on the activated component, generating self-test result signals, and transmitting and receiving the self-test results to a remote unit. As stated above, Hill et al. do not appear to teach a signal that activates an HVAC component. Additionally, Hill et al. do not appear to teach transmitting a maintenance signal that activates a component. Hill et al. thus do not appear to teach each and every element of the independent claim or the claims dependent thereon. Additionally, Hill et al. do not appear to teach the specific elements of dependent claims 32-34. Thus, Hill et al. fail to teach each and every element of the claims and cannot be deemed to anticipate the claims. Reconsideration and withdrawal of the rejection is respectfully requested.

Reconsideration and reexamination are respectfully requested. It is submitted that, in light of the above remarks, all pending claims 1-34 are now in condition for allowance. If a telephone interview would be of assistance, please contact the undersigned attorney at 612-359-9348.

Dated: January 18, 2007

Respectfully submitted,



Brian N. Tufte, Reg. No. 38,638  
CROMPTON, SEAGER & TUFTE, LLC  
1221 Nicollet Avenue, Suite 800  
Minneapolis, MN 55403-2402  
Telephone: (612) 677-9050  
Facsimile: (612) 359-9349



# ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

## Title of Invention

REMOTE TESTING OF HVAC SYSTEMS

Application Number : 10/822882



Confirmation Number: 4002

First Named Applicant: Richard Simons

Attorney Docket Number: H0006930-07661161.1163101

Art Unit:

Examiner:

Search string: ( 4920263 or 5191874 or 5197862 or 5388444 or 5551797 or 5836815 or 6167766 or 6711470 or 6853958 or 20030034898 or 20030140090 or 20040133314 or 20040232345 or 20050033707 or 20050130652 or 20050164678 ).pn

## US Patent Documents

**Note: Applicant is not required to submit a paper copy of cited US Patent Documents**

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	4920263	1990-04-24	Fimian et al.			
	2	5191874	1993-03-09	Fimian et al.			
	3	5197862	1993-03-30	Kladder			
	4	5388444	1995-02-14	Gerard			
	5	5551797	1996-09-03	Sanford			
	6	5836815	1998-11-17	Jennemann			
	7	6167766	2001-01-02	Dunn et al.			
	8	6711470	2004-03-23	Hartenstein et al.			
	9	6853958	2005-02-08	Turin et al.			

## US Published Applications

**Note: Applicant is not required to submit a paper copy of cited US Published Applications**

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
	1	20030034898	2003-02-20	Shamoon et al.			
	2	20030140090	2003-07-24	Rezvani et al.			
	3	20040133314	2004-07-08	Ehlers et al.			
	4	20040232345	2004-11-25	Jagam et al.			
	5	20050033707	2005-02-10	Ehlers et al.			
	6	20050130652	2005-06-16	O'Toole et al.			

	7	20050164678	2005-07-28	Rezvani et al.			
--	---	-------------	------------	----------------	--	--	--

**Signature**

Examiner Name	Date